

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)

P.O. No.: T-1265
AtmAA Project No.: 3708
Client Project No.: T-1265

Tedlar Bag Samples

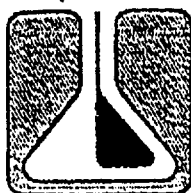
Date Received: April 5, 1991
Date Analyzed: April 5, 1991

<u>Component</u>	<u>Sample ID</u>	<u>Duplicates Analyses</u> <u>Run #1</u> <u>Run #2</u>	<u>Mean</u> <u>Conc.</u>	<u>% Diff.</u> <u>from Mean</u>	
		(Concentration in ppm, v/v)			
Hydrogen Sulfide	Inlet #1	45.4	47.8	46.6	2.6
Methyl Mercaptan	Inlet #3	1.24	1.31	1.28	2.7
Dimethyl Sulfide	Inlet #3	3.70	3.90	3.80	2.6

A set of three Tedlar bag samples laboratory number 90951-(4-6) was analyzed for sulfur compounds. Agreement between duplicate analyses is a measure of precision and is shown above in the column "% Difference from Mean". Duplicate analyses are an important part of AtmAA's quality assurance program. The average % Difference from Mean for 3 duplicate measurements from the sample set of three Tedlar bags is 2.6%.



APPENDIX C
FUEL ANALYSIS AND USAGE



ZALCO LABORATORIES, INC.

Analytical & Consulting Services

SOUTH COAST ENVIRONMENTAL
1915 McKinley, Suite E
Livermore, CA 91750

Lab. No.: 027378_001
Received: May 3, 1991
Reported: May 3, 1991

Attention: Russ Logan

Sample Description: PEN-OTAY LF Ice #1 Inlet

* CHROMATOGRAPHIC ANALYSIS (Z 1610) *

Components	Mole %	ppm	Wt %	G.P.M.
Carbon Dioxide	38.428	384280	60.666	
Oxygen	2.198		2.522	
Nitrogen	5.733		5.761	
Carbon Monoxide	0.000		0.000	
Methane	53.567	535,670	30.827	
Ethane	0.000		0.000	
Propane	0.000		0.000	0.000
IsoButane	.004	40	.008	.001
N-Butane	0.000		0.000	0.000
IsoPentane	0.000		0.000	0.000
N-Pentane	0.000		0.000	0.000
Hexanes+	.070	700	.215	.030
Totals =	100.000	920,690	100.000	.031

SPECIFIC GRAVITY (Air = 1)	.9664
* SPECIFIC VOLUME, cu.ft./lb	13.56
* GROSS CALORIFIC VALUE, BTU/cu.ft.	537.60
** GROSS CALORIFIC VALUE, BTU/cu.ft.	546.89
** GROSS CALORIFIC VALUE, BTU/lb	7414.66
* NET CALORIFIC VALUE, BTU/cu.ft.	484.14
** NET CALORIFIC VALUE, BTU/cu.ft.	492.51
COMPRESSIBILITY FACTOR 'Z' (60 F, 1 ATM)	.9975

* Water Saturated

** Dry Gas @ 60 F, 14.73 psia

Maryann W. Benoit
Organics Supervisor

Richard L. Penner
Laboratory Director

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LA VERNE, CA 91750
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COMPANY

6600-7000

FILE REF: ST11

INTERNAL COMBUSTION ENGINE FIELD DATA AND EMISSION DATA FORM

FACILITY: Pacific Energy
DATE: 4.3.91
PROJECT I.D. #: T-1251

TEST NO. _____
BAROMETRIC PRESSURE: 29.76
AMBIENT TEMP: _____

UNIT	: <u>Pacific Energy</u>	:	:	:
RATED HP	:	:	:	:
RATED RPM	:	:	:	:
SITE	:	:	:	:
TIME	:	:	:	:
ACTUAL BHP	:	:	:	:
ACTUAL RPM	: <u>910</u>	:	:	:
% LOAD (GKW/NEW)	: <u>1951 / 1680</u>	:	:	:
FUEL TEMP	: <u>70°</u>	:	:	:
FUEL PRES	:	:	:	:
FUEL USAGE	: <u>588 SCFM</u>	:	:	:
Manifold vac pres	: <u>13.8</u>	:	:	:
% CO2	: <u>11.62</u>	:	: <u>11.62</u>	:
% O2	: <u>8.12</u>	: <u>8.12</u>	: <u>8.12</u>	:
NOX, ppm	: <u>160</u>	: <u>160</u>	: <u>160</u>	:
NOX, 15%O2	:	:	:	:
NOX, LB/HR	:	:	:	:
CO, ppm	: <u>253</u>	: <u>252</u>	: <u>253</u>	:
CO, 15%O2	:	:	:	:
CO, LB/HR	:	:	:	:
BTU/CF	: <u>555</u>	:	:	:
NO2	: <u>40/655</u>	:	:	:

COMMENTS: Temperature left 104°F Right 103°F 86°F Post



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APPENDIX D
QUALITY ASSURANCE

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CHAIN OF CUSTODY RECORD

CLIENT: *PFn*

JOB #: *T1265*

LAB: *Enseco - G.G.*

Samplers: (signature)

Ruth Shannon

Run Number	Station Location	Date	Time	Sample Type			Sample ID #	Analysis Required
				Water	AIR			
				comp	grab			
1	ICE #1 - Exhaust	4/3	1400			✓	HCL - Front Half	HCL
1	" " "	"	1400			✓	HCL - Back Half	HCL
2	" " "	4/5	800			✓	HCL - Front Half	HCL
2	" " "	"	800			✓	HCL - Back Half	HCL
3	" " "	"	1030			✓	HCL - Front Half	HCL
3	" " "	"	1030			✓	HCL - Back Half	HCL
1	" " "	4/3	1400			✓	HCL - Filter #1	HCL
2	" " "	4/5	800			✓	HCL - Filter #2	HCL
3	" " "	4/5	1030			✓	HCL - Filter #3	HCL
N/A	" " "	4/3	N/A			✓	Filter Blank	HCL
N/A	" " "	4/3	N/A			✓	NaHCO ₃ Blank	HCL

RELINQUISHED BY: (SIGNATURE)

RECEIVED BY: (SIGNATURE)

DATE/TIME

4/8 1345

RELINQUISHED BY: (SIGNATURE)

RECEIVED BY: (SIGNATURE)

DATE/TIME

RELINQUISHED BY: (SIGNATURE)

RECEIVED BY: (SIGNATURE)

DATE/TIME

RELINQUISHED BY: (SIGNATURE)

RECEIVED BY: (SIGNATURE)

DATE/TIME

DISPATCHED BY: (SIGNATURE)

DATE/TIME

RECEIVED BY LAB BY:

DATE/TIME

METHOD OF SHIPMENT: *FEDx*

CLIENT:

JOB # :

T/2 65

LAB:

Samplers: (signature)

RELINQUISHED BY: (SIGNATURE)	RECEIVED BY: (SIGNATURE)		DATE/TIME
<i>Kath Shannon</i>			4/8 1345
RELINQUISHED BY: (SIGNATURE)	RECEIVED BY: (SIGNATURE)		DATE/TIME
RELINQUISHED BY: (SIGNATURE)	RECEIVED BY: (SIGNATURE)		DATE/TIME
RELINQUISHED BY: (SIGNATURE)	RECEIVED BY: (SIGNATURE)		DATE/TIME
DISPATCHED BY: (SIGNATURE)	DATE/TIME	RECEIVED BY LAB BY:	DATE/TIME
METHOD OF SHIPMENT: <i>Fedx</i>			